

IN THE CLAIMS

Please amend the claims as follows:

Listing of Claims:

1. (Original) A radio communication management method in a radio communication system which manages link connection of a mobile terminal using HMIPv6,

wherein the mobile terminal transmits information on authentication for accessing a desired network together with information for changing the link connection with respect to a server which manages the link connection of the mobile terminal to reduce a time required for changing the link connection of the mobile terminal.

2. (Original) The radio communication management method according to claim 1, wherein the mobile terminal transmits the information for changing the link connection and the information on the authentication as one piece of information, and the server which manages the link connection acquires each of the information for changing the link connection and the information on the authentication from the one piece of information.

3. (Original) The radio communication management method according to claim 1, wherein the server which manages the link connection acquires an authentication result by an authentication process using the information on the authentication.

4. (Original) The radio communication management method according to claim 3, wherein the server which manages the link connection communicates with an authentication server which authenticates the mobile terminal to acquire the authentication result.

5. (Original) The radio communication management method according to claim 3, comprising the steps of: transmitting information notifying that the change of the link connection of the mobile terminal has been confirmed and the authentication result as one piece of information to the mobile terminal.

6. (Original) The radio communication management method according to claim 3, wherein the server which manages the link connection transmits information notifying that the change of the link connection of the mobile terminal has been confirmed to the mobile terminal, and thereafter transmits the authentication

result to the mobile terminal in a case where the authentication result is capable of being acquired.

7. (Original) The radio communication management method according to claim 6, wherein the server which manages the link connection sets a time until acquiring the authentication result, and transmits the authentication result to the mobile terminal together with information notifying that the change of the link connection of the mobile terminal has been confirmed, when next receiving the information for changing the link connection from the mobile terminal in a case where the authentication result is capable of being acquired within the time until acquiring the authentication result.

8. (Original) The radio communication management method according to claim 7, wherein the server which manages the link connection sets a predetermined tentative permission time for which the mobile terminal tentatively permits an access to the desired network, and transmits, to the mobile terminal, information notifying the permission of the access to the desired network only for the predetermined time together with the

information notifying that the change of the link connection of the mobile terminal has been confirmed.

9. (Original) The radio communication management method according to claim 8, wherein the server which manages the link connection sets a predetermined permission time which is longer than the predetermined tentative permission time and for which the mobile terminal permits the access to the desired network, and transmits, to the mobile terminal, the information notifying the permission of the access to the desired network only for the predetermined permission time together with the information notifying that the change of the link connection of the mobile terminal has been confirmed in a case where the authentication result indicates authentication success.

10. (Original) The radio communication management method according to claim 8, wherein the server which manages the link connection performs registration relating to the change of the link connection of the mobile terminal which has permitted the access to the desired network for the predetermined tentative permission time or only for the predetermined permission time, and deletes the registration relating to the change of the link

connection of the mobile terminal in a case where the predetermined tentative permission time or the predetermined permission time has elapsed.

11. (Original) The radio communication management method according to claim 3, wherein the server which manages the link connection sets a time until acquiring the authentication result, and judges the authentication result as authentication failure in a case where the authentication result is not capable of being acquired within the time until acquiring the authentication result.

12. (Currently Amended) The radio communication management method according to claim 5 or 6, wherein the server which manages the link connection sets a predetermined connection prohibition time with respect to the mobile terminal, and does not perform a process relating to the change of the link connection of the mobile terminal which has failed in the authentication and a process relating to the authentication for the predetermined connection prohibition time after notification of authentication failure in a case where the authentication

failure is notified as the authentication result with respect to the mobile terminal.

13. (Currently Amended) The radio communication management method according to claim 5 or 6, wherein the server which manages the link connection performs registration relating to the change of the link connection of the mobile terminal which has succeeded in the authentication only in a case where authentication success is notified as the authentication result with respect to the mobile terminal.

14. (Original) A radio communication management method in a radio communication system which manages link connection of a mobile terminal,

wherein the mobile terminal transmits information on authentication for accessing a desired network together with information for changing the link connection with respect to a server which manages the link connection of the mobile terminal, and

the server which manages the link connection sets a time until acquiring an authentication result by an authentication process using the information on the authentication, and

transmits the authentication result to the mobile terminal in a case where the authentication result is capable of being acquired within the time until acquiring the authentication result.

15. (Original) The radio communication management method according to claim 14, wherein the server which manages the link connection sets a predetermined tentative permission time for which the mobile terminal tentatively permits an access to the desired network, and transmits, to the mobile terminal, information notifying the permission of the access to the desired network only for the predetermined time.

16. (Original) The radio communication management method according to claim 15, wherein the server which manages the link connection sets a predetermined permission time which is longer than the predetermined tentative permission time and for which the mobile terminal permits the access to the desired network, and transmits, to the mobile terminal, the information notifying the permission of the access to the desired network only for the predetermined permission time in a case where the authentication result indicates authentication success.

17. (Currently Amended) The radio communication management method according to claim 15 or ~~16~~, wherein the server which manages the link connection cuts the connection of the mobile terminal in a case where the predetermined tentative permission time or the predetermined permission time has elapsed.

18. (Original) A radio communication management method in a radio communication system which manages link connection of a mobile terminal,

wherein the mobile terminal transmits information on authentication for accessing a desired network together with information for changing the link connection with respect to a server which manages the link connection of the mobile terminal, and

the server which manages the link connection sets a time until acquiring an authentication result by an authentication process using the information on the authentication, and judges the authentication result as authentication failure in a case where the authentication result is not capable of being acquired within the time until acquiring the authentication result.



19. (Currently Amended) The radio communication management method according to claim 14 ~~or 18~~, wherein the server which manages the link connection sets a predetermined connection prohibition time with respect to the mobile terminal, and does not perform a process relating to the mobile terminal which has failed in the authentication only for the predetermined connection prohibition time after notification of the authentication failure in a case where the authentication failure is notified as the authentication result with respect to the mobile terminal.

20. (Original) The radio communication management method according to claim 14, wherein the server which manages the link connection performs registration relating to the change of the link connection of the mobile terminal which has succeeded in the authentication only in a case where authentication success is notified as the authentication result with respect to the mobile terminal.

21. (Original) A radio communication management server which manages link connection of a mobile terminal using HMIPv6, constituted to receive, from the mobile terminal, information for

changing the link connection and information on authentication for accessing a desired network as one piece of information, and acquire each of the information for changing the link connection and the information on the authentication from the one piece of information.

22-39. Cancelled.

40. (New) The radio communication management method according to claim 6, wherein the server which manages the link connection sets a predetermined connection prohibition time with respect to the mobile terminal, and does not perform a process relating to the change of the link connection of the mobile terminal which has failed in the authentication and a process relating to the authentication for the predetermined connection prohibition time after notification of authentication failure in a case where the authentication

41. (New) The radio communication management method according to claim 6, wherein the server which manages the link connection performs registration relating to the change of the link connection of the mobile terminal which has succeeded in the

authentication only in a case where authentication success is notified as the authentication result with respect to the mobile terminal.

42. (New) The radio communication management method according to claim 18, wherein the server which manages the link connection sets a predetermined connection prohibition time with respect to the mobile terminal, and does not perform a process relating to the mobile terminal which has failed in the authentication only for the predetermined connection prohibition time after notification of the authentication failure in a case where the authentication failure is notified as the authentication result with respect to the mobile terminal.